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U.S. Department of the Interior
Bureau of Land Management

Environmental Assessment UT- 100-09-EA-09

LITTLE CREEK COMMUNITY PIT

Location: **WASHINGTON COUNTY, UTAH**
Applicant/Address: **U. S. Bureau of Land Management, St. George Field Office**

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INTRODUCTION AND NEED FOR THE PROPOSED ACTION

INTRODUCTION

This document is prepared in compliance with the National Environmental Policy Act (NEPA). Its purpose is to analyze the impacts of the proposed action, alternatives, and recommend mitigation measures that would eliminate or lessen environmental impact.

Background

The Little Creek Cinder Community Pit administered by the Bureau of Land Management (BLM) is located on Little Creek (Gray Knoll) cinder cone in Apple Valley approximately 10 miles southeast of Hurricane and 20 miles east of St. George in T. 43 S., R. 11 W., sec. 6 and T. 43 S., R. 12 W., sec. 1 in Washington County, Utah (Figure 1). Mining of cinders as a source of lightweight aggregate has taken place in the Little Creek cinder cone (Gray Knoll) site since the1945 and a total of 200,000 tons of cinders as determined by GPS survey have been mined. In 1961, a 127.5 acre Mineral Material Right of Way (U-60729) on the east part of the cinder cone was issued to Utah Department of Transportation (UDOT) for road construction and maintenance. In 1991, a patent application (U-18932) for claims filed in the 1950's was rejected and in 1992, the Little Creek Community pit consisting of 63.74 acres on the south side of the cinder cone was established (U-70051) to provide a continued local source of cinders to the community. In 2007, UDOT relinquished their Material Site ROW and the Little Creek Community pit was redefined to a designated 126 acres that includes the entire cinder cone and all the disturbed areas (Figure 1). Sixty-five acres to the north of the cinder cone previously under the UDOT material site ROW were not included in the pit designation.

NEED FOR THE PROPOSED ACTION

The BLM St. George Field Office completed Categorical Exclusion 91-47 in 1991 for general operations within the Little Creek Community pit that is no longer sufficient for the scope of the operations and needs to be updated to assure conformance with environmental requirements. The proposed 42 acre active sales area within the redefined 126 acre Community pit designation would encompass the existing disturbance on the cinder cone and allow for continued resource development (Figure 2). The designated Little Creek Community Pit boundary now includes part of the acreage that was part of the former UDOT ROW. The original 1992, 64 acre designated community pit area includes only half of the 13.5 acre south pit disturbance and does not include the 4.5 acre former UDOT east pit disturbance. The total UDOT/Community pit designated area would be reduced from 191 acres to a designated Community pit area of 126 acres. Mining operations within the Little Creek Community pit are designed to be low to moderate impact and yearly sales are limited to 50,000 tons per year or less as necessary.

This assessment will evaluate the impacts for the potential sale of 1 million cubic yards of cinders through competitive/negotiated sales, small (less than $2000.00) over the counter sales and free use permits from the active sales area of the community pit. Both short and long term contracts to remove mineral materials are issued to state and local governments, companies and the general public. Mineral materials are sold at fair market value, which is determined through appraisal. Approximately 18 acres have been affected by mining to date, 4.5 acres within the east pit and 13.5 acres in the south pit. This EA will analyze the environmental impacts of mining of cinders for the proposed 42 acre sales area.

The cinders are used as a source of lightweight aggregate, typically for use as road metal and in the manufacture of cinder block products. These materials are not readily available on private lands and this community pit represents a local source for St. George and the Washington County area. Washington County is growing and the current and planned development projects will increase demand for all mineral materials. Mineral material sales may be made as long as the aggregate damage to public lands and resources would not exceed the benefits derived from the proposed sale (43 CFR 3600.0-4).

CONFORMANCE WITH BLM LAND USE PLAN(S)

The action conforms to the St. George Field Office Resource Management Plan, signed March 1999, Objective MI-12, page 2.9.

RELATIONSHIPS TO STATUTES, REGULATIONS AND OTHER PLANS

The proposed action is in conformance with Federal Regulations and Bureau Policies. The Act of July 31, 1947, as amended (30 U.S.C. 601 et seq.) gives authority for the disposal of mineral materials from public lands of the United States. Section 302 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1732) directs the Secretary to manage public lands under the principles of multiple use and sustained yield in accordance with land use plans developed under the act.

The 43 CFR 3600 regulations establish procedures for the exploration, development and disposal of mineral material resources under permit or contract for sale, or free use. Subpart 3603 deals with community pits and common use areas, while Subpart 3602 deals with mineral material sales.

Activities occurring on public lands are subject to all Federal, State and local regulations concerning health and safety. Zoning laws or ordinances do not apply to Federally managed lands.

PROPOSED ACTION AND DESCRIPTION OF ALTERNATIVES

INTRODUCTION

The Little Creek Community Pit site is located approximately 10 miles southeast of Hurricane, Utah and 20 miles east of St. George, Utah (Figures 1 and 2). The community pit was established by the BLM in 1992 on the south flank of the Gray Knoll cinder cone located on the eastern part of Little Creek Mesa, just north of Little Creek. Elevations range from about 5,200 ft at the base of the cinder cone to 5,511 ft on the top of the cinder cone within the designated pit boundary (Figure 1). The Little Creek Community Pit area is contiguous with federally owned lands administered by the BLM.

The pit is located within the Quaternary age, 345,000 year old Gray Knoll Cinder Cone, of basaltic to trachybasaltic composition that overlies the Shinarump Conglomerate Member of the Triassic Chinle Formation (Hayden, 2004) (Photograph 1 an 2-Appendix B). The material generally consists of friable, variably oxidized black and red basaltic cinders. The exposed black cinders are ¼ inch to 6 inches in length (Photograph 5), while the red cinders are better sorted and range from 1/8 inch to 4 inches in length (Photograph 9). The material is used as a source of lightweight aggregate and in the manufacture of cinder block products. In addition to the cinders, some scoriaceous basaltic material is also present that could be used for landscape purposes.

A 1971 Materials Inventory report for Washington County by the Utah Department of Highways (site # 27021) estimated that the cinder cone contained a resource of 4,200,000 cubic yards of material. A cut bank sample (125 ft. thick) contained:

Pre-crushing
- 5.9% greater than 3 inch
- 40.6% greater than 1 inch

After crushing to 1 inch maximum size
- 100.0% passed through a 1 inch sieve
- 56.5% passed through a ½ inch sieve
- 28.5% passed through a no. 4 sieve
- 19.8% passed through a no. 10 sieve
- 8.0% passed through a no. 40 sieve
- 2.8% passed through a no. 200 sieve

(Liquid Limit -22.1; swell- 0.011; AASHO classification- A-1-a; Abrasion- 500 rev.- 25.8)

Operations :

The Little Creek cinder cone contains approximately 18 acres that have been disturbed by past mining and consists of two working areas (Figure 1). A southern main pit area that consists of a total of 13.5 disturbed acres that exposes black and red cinders (Photographs 1, 3-5) and a 4.5 acre eastern pit cut in black cinders (Photographs 2, 6-9). Almost all of the sales in the past several years have come from the south pit.

The extraction of cinders from the Little Creek Community Pit is by simple open pit methods. Commercial operations currently consist of bulldozers, front end-loaders, and haul trucks. Bulldozers are used to rip mineral materials loose and loaders scoop up the material for transfer to haul trucks and no blasting is required. Individuals use small bobcat-type loaders or hand shovels to extract and transfer the material to trailers. In the future, commercial operations may include rock crushing and screening plants to produce the desired end product if the smaller sized material is depleted. Crushing operations require pre-approval by the BLM and a conditional use permit from Washington County. Overburden ranging from 0.5 ft to 6 ft consisting of soil, is stripped away to expose the cinders and stockpiled (Photographs 3, 6, and 8 Appendix B).

Water trucks, scales, service vehicles and personal vehicles would also occupy the site at various times. Water, magnesium chloride, lignin sulfate, asphalt and other dust suppressants would be used during mining activities as needed. All dust palliative applied must be not prohibited for ground surface application by the EPA, the Utah Department of Environmental Quality (UDEQ) or any applicable law or regulation, as treatment material for reducing fugitive dust emissions. All operations would have to use best available control technology to meet air quality regulations.

The designated Little Creek Community Pit is estimated to contain a total resource of about 4.2 million cubic yards (1.3 million tons) of cinders and scoriaceous basaltic material. The proposed 42 acre mine plan area contains a resource of over a million cubic yards of material. The proposed mine plan area would include the existing disturbance and the undisturbed area between the pits. The calculation was made assuming that the cinders would be mined to the base of the cone at an elevation of 5,200 ft to the 4,880 ft level, within an area of 42 acres at an average mining thickness of 20 ft (Figure 2). The calculation was made assuming an average mining thickness of 20 ft over a mineable area of 42 acres and by subtraction of the previously mined area. An estimated 1 million cubic yards or 800,000 tons of mineable cinders remain. The tonnage figure is based on an estimated conversion factor of 0.75 tons/cubic yard.

Mining of cinders as a source of lightweight aggregate has taken place in the Little Creek cinder cone (Grey Knoll) site since the1945 and a total of approximately 200,000 tons of cinders as determined by GPS survey have been mined. Mining operations within the Little Creek Community Pit are designed to be low impact. The BLM will monitor impacts to the surrounding communities and limit yearly sales to 75,000 tons per year or less as necessary. Yearly Production since 2005 has ranged from 186 to 1,066 tons of material from the community pit and production could be expected to increase to as much

as 25,000 tons of cinders per year with an operational lifetime of 50 years. High tonnage sales for short periods are possible for major construction projects such as roads. All sales would be at fair market value and in accordance with regulations. Contracts and permits expire when either the tonnage limitations are reached or the expiration date is met, which ever comes first

Reclamation :

Reclamation would be accomplished by grading or re-contouring the site when practicable. Mining would be limited to a depth of approximately 20 ft to prevent the development of a large pit and facilitate reclamation. Any remaining pit slopes would be graded to blend with surrounding areas, and generally would not exceed 30 degrees. Any stockpiled materials would be used to reduce the slopes or be shaped to fit into the existing surroundings. Stockpiled top soil would be distributed over the re-contoured areas to facilitate re-vegetation. Disturbed areas would be seeded with a native or approved seed mixture to re-establish vegetation. Some plants may also be selected from the surrounding area for transplantation. Reclamation would either be completed by the BLM using funds collected for reclamation purposes or by the operators as part of their bond release obligation. The mining plan and management objective of the pit is to create no significant highwall. The former UDOT site has a significant highwall that will be re-contoured as mining proceeds.

No Action-"Pit Closure" - Alternative

Under this alternative general sales and permits would cease and the site would eventually be reclaimed.

AFFECTED ENVIRONMENT
CHAPTER 3

INTRODUCTION AND GENERAL SETTING

The affected environment of the Proposed Action and No Action alternatives were considered and analyzed by an interdisciplinary team as documented in the Interdisciplinary Team Analysis Record Checklist, Appendix A. The checklist indicates which resources of concern are either not present in the project area or would not be impacted to a degree that requires detailed analysis. Critical Elements of the Human Environment are those elements that are subject to the requirements specified in statute, regulation, or executive order, and must be considered in all EA's (BLM H-1790-1, Appendix 5). Critical Elements of the Human Environment that were considered for this action are noted below and are included in Appendix A. Resources, including Critical

Elements, which could be impacted to a level requiring further analysis are described in Chapter 3 and impacts on these resources are analyzed in Chapter 4 below.

The Little Creek community pit is located on the southwestern edge of the Colorado Plateau Physiographic Province in the High Plateaus Section near the contact with the Transition Zone between the Colorado Plateau and Basin and Range Physiographic Provinces. The designated community pit area is on east side of Little Creek Mountain mesa to the south. Elevations range from 4,600 ft. on the valley floor around the base of the cinder cone to 4,800 ft. on top of the cinder cone within the designated pit boundary (Figure 2). The Little Creek Community Pit area is contiguous with Federally owned lands administered by the U.S. Bureau of Land Management.

The pit is located within the Quaternary age Little Creek Creek cinder cone, of medium gray fine-grained basalt to trachybasalt with sparse olivine (Hayden, 2004) (Photograph 1 an 2-Appendix B). The area soils have been classified as Bond-Rock land association consisting of well, gently sloping to strongly sloping, shallow sandy loams and Rock-land on Mesas. The community pit is specifically on cinder land. The cinder land is steep and contains little or no soil. Soil cover/overburden exists primarily on the top area of the cone to a depth of about 6 ft. while the side slopes of the cone are relatively free or contain a thin veneer of soil overburden. Soil type is classified as cinder land and supports sagebrush and grasses (Photograph 1, 2 and 6- Appendix B). The climate is semiarid and the average yearly precipitation ranges from 12 to 14 inches per year. Winters are mild and summers are mostly hot with average annual temperatures around 56° to 59° F, and transitory extremes generally range from 20° F to 105° F. (See United States Department of Agriculture, 1977, p. 4 and 12).

Access to the Little Creek community pit is by a 2 mile long dirt road off of State Highway 59 at Big Plain Junction. The highway is a major supply route for southern Utah and northwestern Arizona, as well as access to Lake Powell, the Grand Canyon, the Grand Staircase-Escalante, and the Kaibab National Forest, and therefore sees heavy local, recreational, and commercial use. Truck traffic would be routed through the cities of Hurricane, 6 miles to the northwest or Colorado City, 14 miles to the southeast. While the Apple Valley rural-residential area has experienced recent growth, the residential development in the St. George/Hurricane area has expanded dramatically.

Wildlife

Most species occurring in the project area are common and widespread in distribution. The project area supports generally lower densities of wildlife than adjacent areas due to past disturbances from mining, and the lack of larger washes and taller trees. Low densities of small mammals, birds, and reptiles are concentrated near areas of vegetation. Wildlife that typically would be found in this area include: badger, antelope ground squirrels, kangaroo rats, deer mice, desert wood rats, mourning doves, common ravens, wrens, house finches, side-blotched lizards, and western whiptails. Infrequently, larger

animals such as raptors, coyotes, and gray fox may pass through the area. The following BLM State Sensitive Species may be found in the project area: ferruginous hawk (permanent resident, fairly common), fringed myotis (permanent resident, uncommon), spotted bat (permanent resident, rare), Townsent's big-eared bat (permanent resident, fairly common), and western threadsnake (permanent resident, rare). Some of these species may use the project area year-long, while others may use it part of the year.

Recreation

Little Creek Mesa is a well known mountain bike destination and use is dominated by mountain bike (50%), with lesser ATV (30%) and 4-wheel drive (20%) activity. A total of 3,859 vehicles drove past the cinder pit and onto Little Creek Mesa in 2008 based on BLM traffic counter data just past the cinder pit area. In 2008, recreational use was at an all time high, with 8,877 visitor days. Casual horseback riding occurs over much of the Little Creek area.

Visual

Visual Resource Management VRM class IV objectives are applied to established mineral material sites and the level of change to the landscape can be high. Public lands surrounding the Little Creek cinder cone are classified as Class III Visual Resource Management objectives. Class III management objectives strive to partially retain the existing character of the landscape, allowing moderate changes which may attract attention but not dominate the view of the casual observer.

Noxious Weeds

No known noxious weed infestations currently exist on the site. Community pits commonly become a weed problem given the disturbance (opportunity for weeds to establish) and large amount of traffic to and from the disturbed site.

Livestock/Grazing

The community pit is currently within the Cinder Mountain Grazing Allotment. Although the pit is in the Allotment, livestock have not been introduced into this particular area.

Cultural

The Little Creek community pit in the Little Creek Area of Critical Environmental Concern (ACEC). The Little Creek Mountain ACEC was designated to protect the extensive archaeological resources that are spread across the entire mesa. Although, the

entire proposed project is within the ACEC boundary, mineral extraction has been occurring at the existing pit site for two decades and this pit predates the SGFO RMP. A Class III inventory has been conducted by the BLM of the project area and no cultural sites, or National Register-eligible or listed properties are within the Area of Potential Effect or that may be adversely affected by this proposal.

Declaration of No Effects

The proposal under consideration would not affect any Areas of Critical Environmental Concern, prime or unique farm lands, Native American Religious Concerns, National Register of Historic Places eligible or listed properties, hazardous or solid wastes, drinking or ground water, wetlands or riparian zones, recreation, wild and scenic rivers, floodplains, migratory birds, noxious weeds, threatened and endangered species, designated wilderness, wilderness study areas, lands with wilderness characteristics, or environmental justice issues.

CHAPTER 4
ENVIRONMENTAL IMPACTS

DIRECT AND INDIRECT IMPACTS

PROPOSED ACTION

Air Quality:

Air quality would be impacted by operations. Dust and other air pollutants would be generated during mining and reclamation. Operations such as clearing of vegetated areas, ripping with bulldozers, transportation of materials to processing areas, processing of materials (crushing/screening) and loading of materials for transport to market would all generate particulate matter.

Sources of carbon monoxide (CO) at the proposed site include the operation of heavy equipment, such as generators, bulldozers, front-end loaders, and haul trucks. Other sources would be employee and service vehicles, although these would represent a small source when compared to the heavy equipment. Sources of CO would also be generated away from the site, by travel to and from the pit by employees and service vehicles.

Production of CO within the site area will be variable. Typically, with small operations, use of equipment will be in concentrated periods. A dozer may be used for several hours to rip and push up materials and then not run for a number of hours, or the rest of the day. Processing equipment will be used to produce materials for stockpile or to meet the days projected usage. A front end loader would be used to move material to the processing

equipment and to load material onto trucks for removal from the pit area. This would be typical of the operations occurring on this project.

Although dust, specifically particulate matter less than or equal to 10 micrometers (PM_{10}) and CO are a concern, the site is not within a non-attainment area and proper dust control would mitigate those effects.

Visual:

Visual Resource Management VRM class IV objectives are applied to established mineral material sites and the level of change to the landscape can be high. Although mining of the site and the pit area is visible, once mining is complete most of the pit area would be contoured with the surrounding surface. Any remaining pit slopes would be graded to blend with surrounding areas, and generally would not exceed 30°. Any stockpiled materials would be used to reduce the slopes or be shaped to fit into the existing surroundings. Disturbed areas would be seeded with an approved seed mixture to re-establish vegetation.

Public lands surrounding the Little Creek cinder cone are classified as Class III Visual Resource Management objectives. Class III management objectives strive to partially retain the existing character of the landscape, allowing moderate changes which may attract attention but not dominate the view of the casual observer. The site occurs on the south slope and the lower part of the east slope of the cinder cone and is partially screened by topographic relief from vantage points to the east and south. The old UDOT east pit area is visible from State Highway 59 that runs along the east side of the cinder cone. The top and the east side of the cinder cone would not be disturbed by mining and therefore not significantly impact the character of the landscape. (See Visual Contrast Rating Worksheet at back).

Wildlife:

Wildlife inhabiting the project area would typically be displaced during operations. During mining of the project area, some small mammals, birds, and reptiles would be killed or disturbed, and some dens, and/or nests maybe destroyed. Overall impacts to small mammals, birds, and reptiles would be insignificant to populations in the general area. Larger animals would be temporarily disturbed and displaced to adjacent habitats while the mine is being worked. Once the area has been mined and restored, small mammals, birds, and reptiles would re-populate the area. Reclamation of those areas would give some types of wildlife and vegetation a chance to reestablish over the long term. Impacts to wildlife, and BLM State Sensitive Species in the general area would be minimal in nature.

The California Condor (Gymnogyps californianus) was listed as endangered in 1976 and a nonessential experimental population was established in 1996. The condor population is designated as an experimental non-essential population in this proposed community pit area. The California condor requires large areas of remote country for nesting, foraging, and roosting. Nesting occurs primarily in chaparral-covered mountains in caves, potholes, and sheltered rock outcrops, while foraging occurs in grasslands. Condors feed only on carrion, mostly of larger animals such as bison, deer, and pronghorn, as well as beached marine animals. Roosting occurs on large, old growth trees or snags, or on isolated rocky outcrops and cliffs (Mesta 1996). As part of a captive breeding and reintroduction program, California condors were released into the wild at the Vermilion Cliffs in northern Arizona near the Grand Canyon in 1997. Condors from this release site have subsequently been observed in various locations in southern Utah, including in and around Zion National Park. These sightings appear to be isolated incidents, and the birds appear to eventually return to the Vermilion Cliffs. Marginal California condor habitat is available within the vicinity of the community pit area, and while condors have the potential to occur within the general area, the species is not known to nest or roost there and would occur only on a transient basis. Potential impacts to the California condor could result from possible displacement if individuals were actually present in the Project Area during removal activities. The proposed project may affect, but is not likely to adversely affect the California condor.

Noxious Weeds:

No known noxious weed infestations currently exist on the site but community pits commonly become a weed problem given the disturbance and large amount of traffic to site. Prevention and abatement of noxious weeds infestations will be accomplished by regular site inspections and removal through mechanical or approved chemical means.

Cultural

The Little Creek community pit in the Little Creek Area of Critical Environmental Concern (ACEC). Although, the entire proposed project is within the ACEC boundary, mineral extraction has been occurring at the existing pit site for two decades and this pit predates the SGFO RMP. A Class III inventory has been conducted by the BLM of the project area and no cultural sites, or National Register-eligible or listed properties are within the Area of Potential Effect or that may be adversely affected by this proposal. Therefore, the redefinition of the Little Creek Community pit to protect the mineral resource and for inclusion of the disturbed areas with relinquishment of the UDOT mineral material site is appropriate. The proposed limited mining plan conforms with the 1999 Resource Management Plan and would not be considered beyond existing and planned operations.

Public Safety/Traffic:

The transport of cinders by the commercial operators is usually by haul truck via a 2 mile long unpaved access road off of highway 59, 3,000 ft north of Big Plain Junction and then west on Highway 59 to St. George (Photograph 4-Appendix B). Individuals haul small tonnages of cinders in pickups or small trailers. The Utah Department of Transportation 2007 statistical data for the Little Creek (Big Plain Junction) section of Route 59 that reported 3,235 vehicles per day of which 24% was truck traffic.

Yearly Production since 2005 has ranged from 186 to 1,066 tons of material from the community pit and production could be expected to increase to as much as 25,000 tons of cinders per year with an operational lifetime of 50 years. Commercial haul trucks with typical capacities of 22 tons would make approximately 1,136 round trips per year, based on a yearly production of 25,000 tons. In the past, larger volumes of cinders were produced for short periods and used in various road projects.

Pit operations would continue to be managed under total production tonnage limitations of 50,000 tons per year and therefore only minor changes in pit traffic should occur. During operational periods loaded haul trucks would increase congestion and potential slowdowns on highway 59.

Access to the Little Creek community pit is by a two mile long dirt road off of State Highway 59. The highway is a major supply route for southern Utah and northwestern Arizona, as well as access to Lake Powell, the Grand Canyon, the Grand Staircase-Escalante, and the Kaibab National Forest, and therefore sees heavy local, recreational, and commercial use. Truck traffic would be routed through the cities of Hurricane, 8 miles to the northwest or Colorado City, 14 miles to the southeast.

Livestock/Grazing:

The community pit is currently within the Cinder Mountain Grazing Allotment. Although the pit is in the Allotment, livestock have not been introduced into this particular area. Should livestock be introduced in the future, and livestock entering the pit area become a problem, the pit area would be fenced and cattle guards constructed where necessary.

Recreation

Little Creek Mesa is a well known mountain bike destination and use is dominated by mountain bike (50%), with lesser ATV (30%) and 4-wheel drive (20%) activity. A total of 3,859 vehicles drove past the cinder pit and onto Little Creek Mesa in 2008 based on BLM traffic counter data just past the cinder pit area. Little Creek Mountain is used

extensively by recreational users, including mountain bikers, equestrians, and ATV enthusiasts. Increased mining activity would result in increased truck traffic moving in and out the proposed project site. This could create a safety hazard for recreational users traveling on the same access road. A good mitigation measure would be to post a sign warning of truck traffic during times of heavy mining activity. It is possible that an increase in noise from the materials pit could impact the recreational experience of non-motorized visitors. A truck traffic sign would also serve as mitigation as visitors would be expecting increased noise. Although no shooting or ATV use is authorized in the pit, these activities typically occur when the pit is not operational. Should these activities become a problem, the pit area will be fenced.

CUMULATIVE IMPACTS

In addition to the Little Creek Community pit, three other mining operations are present in the area. Cinders are produced East Hurricane Cinder Community pit and minor amounts of sand and gravel is produced from a UDOT mineral material Right of Way on federally administered lands. Thirstystone operates a small quarry approximately one mile to the southeast on private lands.

The East Hurricane Community pit (UTU-688840), is located approximately 4 miles to the northwest and is the largest producer of cinders in the county. In 2007 and 2008 the East Hurricane pit had total production of approximately 45,000 tons and 36,000 tons, respectively. Approximately 60% goes to production of cinder block and the remainder is used on roads. The western part of the pit is contiguous with the Utah Department of Transportation (UDOT)/Federal Highway Administration Material Site R-O-W (UTU-0071161) on BLM administered lands on the west. The UDOT R-O-W UT-0071161 was originally filed in 1961 and enlarged to 80 acres in 1983. Since 1961, UDOT has only mined a limited amount of material for road improvement use. UDOT personnel reported that cinders have not been mined from the UDOT mineral material site for the last 5 or 6 years.

The 10 acre UDOT material site ROW (UTU-043039) is located 2.5 miles to the north along Route 59 (T. 42 S. R. 12 W. sec. 24 SE1/4SW1/4) in alluvial material that is used for very small volumes of fill material on county roads on an as needed basis.

Thirstystone operates a small quarry approximately one mile to the southeast (T. 43 S. R. 11 W. sec. 7 SW1/4NE1/4). Blocks of solution banded sandstone are mined and shipped to their plant in Tucson, AZ.

No additional actions or proposed actions are known on public lands in the immediate area. The Little Creek Knoll Cinder Community pit production in the past has been minor, with a maximum of 1,066 tons/year since 2005. Similar production levels are expected in the near future but as the resource at the East Hurricane pit becomes depleted

or should the quality of the material change, the Little Creek Pit could see more production. Colorado City Public Works mines about 10,000 tons of cinders per year from the East Hurricane pit without processing. They stated that the exposed Little Creek pit material would need to be crushed and screened for their road improvement use.

NO ACTION -"Pit Closure" - Alternative

Under this alternative general sales and permits would cease and the site would eventually be reclaimed. This alternative would be in conflict with the current St George Resource Management Plan and 43 CFR 3600 regulations, unless there is a showing that the aggregate damage to public lands and resources would exceed the benefits derived from the sale of the mineral materials. Mineral materials are not readily available on private lands and this community pit has produced limited amounts of cinders for lightweight aggregate since the 1940's. Most of the cinder production in recent years has come from the BLM managed East Hurricane cinder pit along State Route 59 in Apple Valley in Washington County approximately 4 miles to the northwest. Closure of the Little Creek Community Pit would result in higher production from the E. Hurricane Community pit. This alternative would remove a resource of needed mineral materials for the rapidly growing St. George area and would be preferred only if undue or unnecessary degradation were shown likely to occur to a resource.

REFERENCES

Hayden, J. M., 2004, Geologic map of the Little Creek Mountain Quadrangle, Washington, Utah: Utah Geological Survey, Open-File Report 204, scale 1:24,000.

United States Department of Agriculture Soil Conservation Service, 1977, Soil Survey of Washington County area, prepared for the U. S. Bureau of Land Management and National Park Service, 140 p.

MITIGATION MEASURES

1. The operator is required to obtain any air quality or operational permits required by state, county, or local laws prior to commencing operations. The holder of the contract shall not violate applicable air and water quality standards or related facility siting standards established by or pursuant to applicable Federal or State law. The operator shall ultimately be responsible for dust abatement within the limits of the permitted area and is responsible for consultation with the Authorized Officer and local authorities for acceptable dust abatement and control methods.

2. The operator shall not cause fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions of fugitive dust beyond the lot line of the property on which the emissions originate.

3. Unpaved haul roads shall be treated with chemical dust suppressant and/or watered as necessary. All dust palliative applied must be not prohibited for ground surface application by the EPA, state and local governments or any applicable law or regulation, as treatment material for reducing fugitive dust emissions. All improvements and maintenance to access roads will be coordinated with Washington County Public Works (e.g., adding a dust suppressant, watering and blading).

4. The operator shall have all vehicles associated with this mining operation to restrict their travel speeds to 25 mph to prevent wildlife impact.

5. No hazardous material or substance will be used or stored on site without specific written authorization of the Authorized Officer. No authorization will be issued for material that is not specifically required for the authorized operations. Solid waste will not be buried, or disposed of on-site, unless permitted. No sewage holding tank discharge will occur on-site, unless permitted. No discharge of oil or other petroleum products is allowed on-site. A self-contained portable toilet and trash dumpster is required for any extended operations.

6. The operator shall collect, remove, and dispose of all trash, garbage, debris, used oil, and other waste materials. These materials must be disposed of in an approved disposal area. Unnecessary material or equipment, including derelict or non-operational vehicles, empty drums or containers, construction debris, unused equipment or other materials, will be removed immediately from the project area.

7. Should any cultural resources such as: boulders containing rock art, human remains, burial items, structures or features (dark soil containing charcoal or artifacts, wall floor, etc.) be encountered during ground disturbing activities, all activity will cease immediately and the Saint George Field Office will be notified immediately pursuant to 36 CFR 80.11.

8. Proper drainage shall be maintained to avoid areas of standing water. Natural drainage shall not be interrupted and excavated material shall not be placed in drainages where it could be washed downstream.

9. Top soil will be salvaged and stockpiled for future reclamation.

10. Reclamation of all surface disturbances must be initiated immediately upon completion of activities, unless otherwise approved by the authorized officer. Reclamation of disturbed areas shall, to the extent practicable, include contouring disturbances to blend with the surrounding terrain, replacement of topsoil, smoothing and blending the original surface colors to minimize impacts to visual resources, and seed the disturbed areas with a mix specified by the Authorized Officer. The slope will be stabilized to prevent erosion.

11. The operator shall comply with Washington County ordinances that require the prevention and abatement of noxious weeds and remove through mechanical or approved chemical means any populations that are found on site.

12. The project area may require fencing if livestock are reintroduced and livestock entering the operation area becomes a problem.

13. Crushing operations will require pre-approval from the Authorized Officer and a conditional use permit from Washington County.

CONSULTATION AND COORDINATION

Russell A. Schreiner, Geologist / Project Lead
Dawna Ferris-Rowley, Asst. Field Office Manager
Kathy Abbott, Realty Specialist
David Kiel, Outdoor Recreation Planner
Kim Leany, Rangeland Management Specialist
Robert Douglas, Wildlife Biologist
Geralyn McEwen, Archaeology Technician
Lynne Scott, Landscape Architect
David Corry, Natural Resources Specialist

Preparer: Russell A. Schreiner Date: July 10, 2009

INDIVIDUALS AND PUBLIC AGENCIES CONTACTED:

Washington County Commission
197 E. Tabernacle
St. George, UT 84770

Mayor Mary Reep,
Town of Apple Valley
6802 Meadow Lark Drive
Apple Valley, UT 84737

Mrs. Charlotte Lomeli, Chairwoman
Shivwits Band of Paiutes
6060 W. 3650 N. North
Ivins, UT 84738

Mrs. Lora Tom, Tribal Chairwoman
Paiute Indian Tribe of Utah
440 North Paiute Drive
Cedar City, UT 84720

Paul Baker
Minerals Program manger
Utah Division of Oil, Gas, and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

PUBLIC COMMENT:

This NEPA action was posted on the Electronic Notification Bulletin Board on September 18, 2009. A Notice of Availability for the Environmental Assessment was posted and the document was sent out for comment for 30 days beginning November 15, 2009 and ending December 15, 2009. One comment of support for continued mineral material operations under the redefined Little Creek Community pit was received from the Washington County Commission.

APPENDICES
APPENDIX A

INTERDISCIPLINARY TEAM ANALYSIS RECORD CHECKLIST

PROJECT NAME: Little Creek Community Pit

NEPA LOG NUMBER: UT-100-09-EA-09

FIELD OFFICE/CODE: St. George Field Office/UT-100

CONTACT: Russell Schreiner

PHONE NUMBER: (435) 688-3205

FILE/SERIAL NUMBER: UTU-70051-09

Project Description:

The Bureau of Land Management (BLM) proposes to redefine the Little Creek Community cinder pit located on Gray Knoll (Little Creek) cinder cone in Apple Valley approximately 10 miles southeast of Hurricane and 20 miles east of St. George in Washington County, Utah (Figure 1). Mining of cinders as a source of lightweight aggregate has taken place in the Little Creek cinder cone (Grey Knoll) site since 1945 and a total of 200,000 tons of cinders have been mined. The BLM St. George Field Office completed Categorical Exclusion 91-47 in 1991 for general operations within the Little Creek Community pit that is no longer sufficient for the scope of the operations and needs to be updated to assure conformance with environmental requirements. The proposed 42 acre active sales area within the redefined 126 acre Community pit designation would encompass the existing disturbance on the cinder cone and allow for continued resource development (Figure 2).

The designated Little Creek Community Pit boundary now includes portion of the acreage that was part of the former Utah Department of Transportation (UDOT) material site. The original 1992, 64 acre designated community pit area includes only half of the existing 13.5 acre south pit disturbance and does not include the 4.5 acre former UDOT east pit disturbance. The total UDOT/Community pit designated area would be reduced from 191 acres to a designated Community pit area of 126 acres. Mining operations within the Little Creek Community pit are designed to be low to moderate impact and yearly sales are limited to 50,000 tons per year or less as necessary. This assessment will evaluate the impacts for the potential sale of 1 million cubic yards of cinders through competitive/negotiated sales, small (less than $2000.00) over the counter sales and free use permits from the active sales area of the community pit. Both short and long term contracts to remove mineral materials would be issued to state and local governments, companies and the general public. Mineral materials are sold at fair market value, which is determined through appraisal. Approximately 18 acres have been affected by mining to

date and this EA will analyze the environmental impacts of mining of cinders for the proposed 42 acre sales area.

The cinders are used as a source of lightweight aggregate and in the manufacture of cinder block products. These materials are not readily available on private lands and this community pit represents a local source for St. George and the Washington County area. Washington County is growing and the current and planned development projects will increase demand for all mineral materials. Mineral material sales may be made as long as the aggregate damage to public lands and resources would not exceed the benefits derived from the proposed sale (43 CFR 3600.0-4).

LEGAL DESCRIPTION:

T. 43 S., R. 12 W., sec. 1 and T. 43 S., R. 11 W., sec. 6 SLM

LOCATION DESCRIPTION / OTHER REMARKS: The Little Creek Cinder Community pit is administered by the Bureau of Land Management (BLM) approximately 10 miles southeast of Hurricane and 20 miles east of St. George in Washington County, Utah (Figure 1).

DETERMINATION OF STAFF: (Choose one of the following abbreviated options for the left column)

NP = not present in the area impacted by the proposed or alternative actions
NI = present, but not affected to a degree that detailed analysis is required
PI = present with potential for significant impact analyzed in detail in the EA; or identified in a DNA as requiring further analysis
NC = (DNAs only) actions and impacts not changed from those disclosed in the existing NEPA documents cited in Section C of the DNA form.

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		CRITICAL ELEMENTS		
NI	Air Quality	During excavation of the cinders dust emission levels increase in the immediate area. This impact is however, is minimal and currently only short term. If large scale excavation occurs dust control measures might be necessary to keep within State of Utah Air Quality Standards.	D. Corry	3/5/09

Determi-nation	Resource	Rationale for Determination*	Signature	Date
PI	Areas of Critical Environmental Concern	The Little Creek Mountain ACEC was designated to protect the extensive archaeological resources that are spread across the entire mesa. While mineral extraction has been occurring at the existing pit site for two decades and this pit predates the SGFO RMP, the entire proposed project is still within the ACEC boundary. Before the proposed expansion can occur, cultural resource field inventories must be completed to identify and evaluate any National Register-eligible or listed properties that are within the Area of Potential Effect or that may be adversely affected by this proposal. Further, it is unclear whether expansion of the community pit is in conformance with the ACEC management prescription for the Little Creek ACEC in the RMP which states "except for existing and planned operations at the Cinder Knoll, the area would be closed to mineral material sales" (page 2.66). Nowhere in the RMP are the "planned operations" clearly defined nor can it be arbitrarily assumed that expansion of the pit acreage beyond what is currently "existing" would conform to the intent of this management prescription and/or the ACEC designation, which is to "emphasize protection and interpretation of archeological resources".	D. Kiel D. Ferris-Rowley	3/4/2009 3/24/09
NP	Cultural Resources	A Class III CR inventory produced no cultural sites in the proposed project area.	G. McEwen	06/01/09
NI	Environmental Justice	This proposal, if authorized, would not result in disproportionately high or adverse health or environmental impacts on low income or minority populations	D. Ferris-Rowley	3/24/09
NP	Farmlands (Prime or Unique)		D. Corry	3/5/09
NP	Floodplains		D. Corry	3/5/09
PI	Invasive, Non-native Species	Given the level of disturbance and the fact that mineral material sites are notorious for developing weed infestations it is important that this issue be adequately addressed. Weed seed from mineral material sites is likely to be transported far and wide with the movement of the material. There needs to be a monitoring and control plan that will ensure that if an infestation does occur that it is quickly identified and eliminated.	K Leany	3/13/09
NP	Native American Religious Concerns	To date, ongoing consultations with American Indian Tribes that claim cultural affiliation to SW Utah have not identified such concerns on public lands within the project area.	G. McEwen	3/5/09
NP	Threatened, Endangered or Candidate Plant Species		R. Douglas	03-09-09
PI	Threatened, Endangered or Candidate Animal Species	California Condor (Gymnogyps californianus) was listed as endangered in 1976 and a nonessential experimental population was established in 1996. The condor population is designated as an experimental non-essential population in this proposed community pit area. The California condor requires large areas of remote country for nesting, foraging, and roosting. Nesting occurs primarily in chaparral-covered mountains in caves, potholes, and sheltered rock outcrops, while foraging occurs in grasslands. Condors feed only on carrion, mostly of larger animals such as bison, deer, and pronghorn, as well as beached marine animals. Roosting occurs on large, old growth trees or snags, or on isolated rocky outcrops and cliffs (Mesta 1996). As	R. Douglas	03-09-09

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		part of a captive breeding and reintroduction program, California condors were released into the wild at the Vermilion Cliffs in northern Arizona near the Grand Canyon in 1997. Condors from this release site have subsequently been observed in various locations in southern Utah, including in and around Zion National Park. These sightings appear to be isolated incidents, and the birds appear to eventually return to the Vermilion Cliffs. Marginal California condor habitat is available within the vicinity of the community pit area, and while condors have the potential to occur within the general area, the species is not known to nest or roost there and would occur only on a transient basis. Potential impacts to the California condor could result from possible displacement if individuals were actually present in the Project Area during removal activities. The proposed project may affect, but is not likely to adversely affect the California condor.		
NP	Wastes (hazardous or solid)	No known issues	RSchreiner	2/28/2008
NI	Water Quality (drinking/ground)	The proposed action is not expected to impact water quality in the area.	D. Corry	3/5/09
NP	Wetlands/Riparian Zones		D. Corry	3/5/09
NP	Wild and Scenic Rivers	There are no Wild and Scenic River segments, including those classified as eligible or suitable, within the proposed project area.	D. Kiel	3/4/2009
NP	Wilderness	There are no Wilderness Study Areas or designated Wilderness within the proposed project area.	D. Kiel	3/4/2009
OTHER RESOURCES / CONCERNS**				
NP	Rangeland Health Standards and Guidelines		K Leany	3/13/09
NI	Livestock Grazing	This Cinder Mountain allotment has been in non-use for some time. The amount of disturbance would not require a livestock adjustment.	K Leany	3/13/09
NP	Woodland / Forestry		K Leany	3/13/09
PI	Vegetation	Vegetation may be damaged or destroyed. A rehab plan needs to include re-vegetation once the material is removed.	K Leany	3/13/09
NP	Special Status Plant Species other than FWS candidate or listed species		R. Douglas	06-30-09
PI	Fish and Wildlife Including Special Status Species other than FWS candidate or listed species e.g. Migratory birds.	The following BLM State Sensitive Species (Sensitive Species) may/do occur in the Little Creek Community Pit area: Ferruginous hawk (permanent resident, fairly common), Big-free-tailed bat (summer resident, rare), Fringed myotis (permanent resident, uncommon), Spotted bat (permanent resident, rare), Townsend's big-eared bat (permanent resident, fairly common), Western red bat (permanent resident, extremely rare), and Kit fox (permanent resident, uncommon). No nests, dens, roosts, or other special use areas for these Sensitive Species have been identified in this material pit area. Wildlife that typically would be found in this area include: badgers, antelope ground squirrels, kangaroo rats, deer mice, desert wood	R. Douglas	06-30-09

Determi-nation	Resource	Rationale for Determination*	Signature	Date
		rats, mourning doves, common ravens, wrens, house finches, side-blotched lizards, and Western whiptails. Infrequently, larger animals such as raptors, coyotes, gray fox, and mule deer may pass through the area. During the operation of this pit, BLM Sensitive species, and larger wildlife may be disturbed, and displaced to adjacent habitats. These species would return to the area once material removal stops. Due to the material removal operation, some small mammals, reptiles, or birds may be killed, and some dens or nests destroyed. General populations of these small animals would not be significantly affected.		
NI	Soils	In the Washington County Soil Survey the proposed action is located on what is identified as Cinder Land. Very little or no soil is on the cones. Cinder land supports only a small amount of brush and grass. The impact to soils as a result of the proposed action is expected to be minimal.	D. Corry	6/30/09
PI	Recreation	Little Creek Mountain is used extensively by recreational users, including mountain bikers, equestrians, and ATV enthusiasts. In 2008, recreational use was at an all time high, with 8,877 visitor days. Increased mining activity would result in increased truck traffic moving in and out the proposed project site. This could create a safety hazard for recreational users traveling on the same access road. A good mitigation measure would be to post a sign warning of truck traffic during times of heavy mining activity. It is possible that an increase in noise from the materials pit could impact the recreational experience of non-motorized visitors. A truck traffic sign would also serve as mitigation as visitors would be expecting increased noise.	D. Kiel	3/4/2009
PI	Visual Resources	Little Creek Mountain is VRM Class III, which means that management activities may be seen, but they should not dominate the view. The SGFO RMP also states that existing mineral materials sites will be managed for VRM Class IV objectives, which allows for major modification of the landscape. After an inspection from multiple locations, it was determined that the proposed project work will not be visible from State Highway 59. A VRM contrast rating is not required.	D. Kiel	3/4/2009
PI	Geology / Mineral Resources/Energy Production	Resources are addressed in the EA	RSchreiner	2/27/2008
NP	Paleontology	No known issues	RSchreiner	2/27/2008
NI	Lands / Access		K. Abbott	6/30/2009
NI	Fuels / Fire Management	Would not change fire suppression efforts or fuel reduction projects in this area.	K Leany	3/13/09
PI	Socio-economics	The Little Creek Community Pit provides a cinder resource that is important to the regional construction sector, city public works departments, and members of the general public. This proposal may be viewed negatively by some residents of Apple Valley due to increased truck traffic on Highway 59.	D. Kiel	7/7/2009
NP	Wild Horses and Burros		K Leany	3/13/09
NP	Wilderness characteristics	There are no lands with wilderness characteristics within the project area. This includes the 1999 BLM re-inventory and the citizen's wilderness proposal.	D. Kiel	3/4/2009

FINAL REVIEW:

Reviewer Title	Signature	Date	Comments
NEPA / Environmental Coordinator			
Authorized Officer			

Follow the italicized instructions below and then delete the asterisks"" in the checklist, this sentence, and the instructions.*
**Rationale for Determination is required for all "NIs." Write issue statements for "PIs"*

SEE MAPS BELOW

Figure 1- Index Map for the Little Creek Community Pit

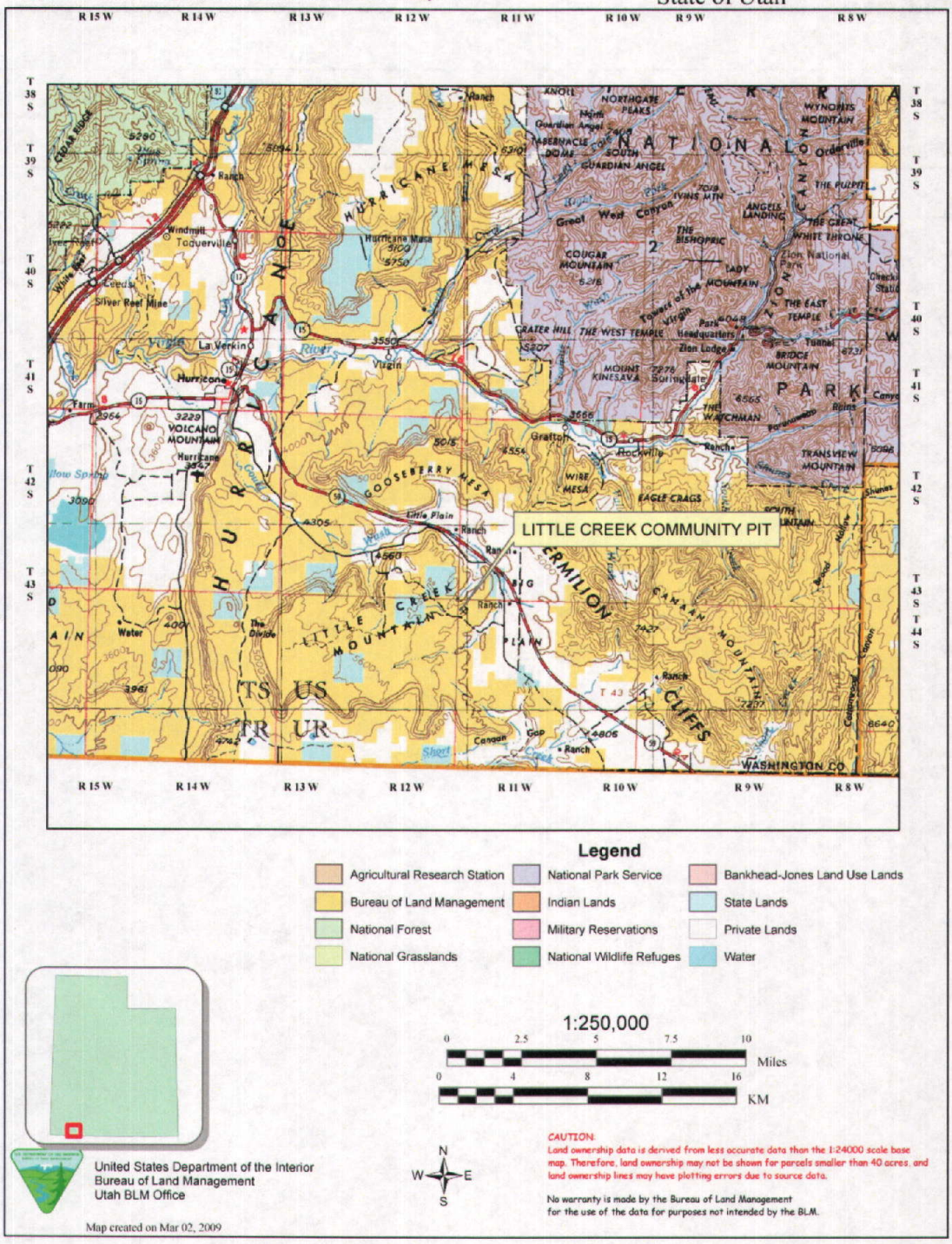
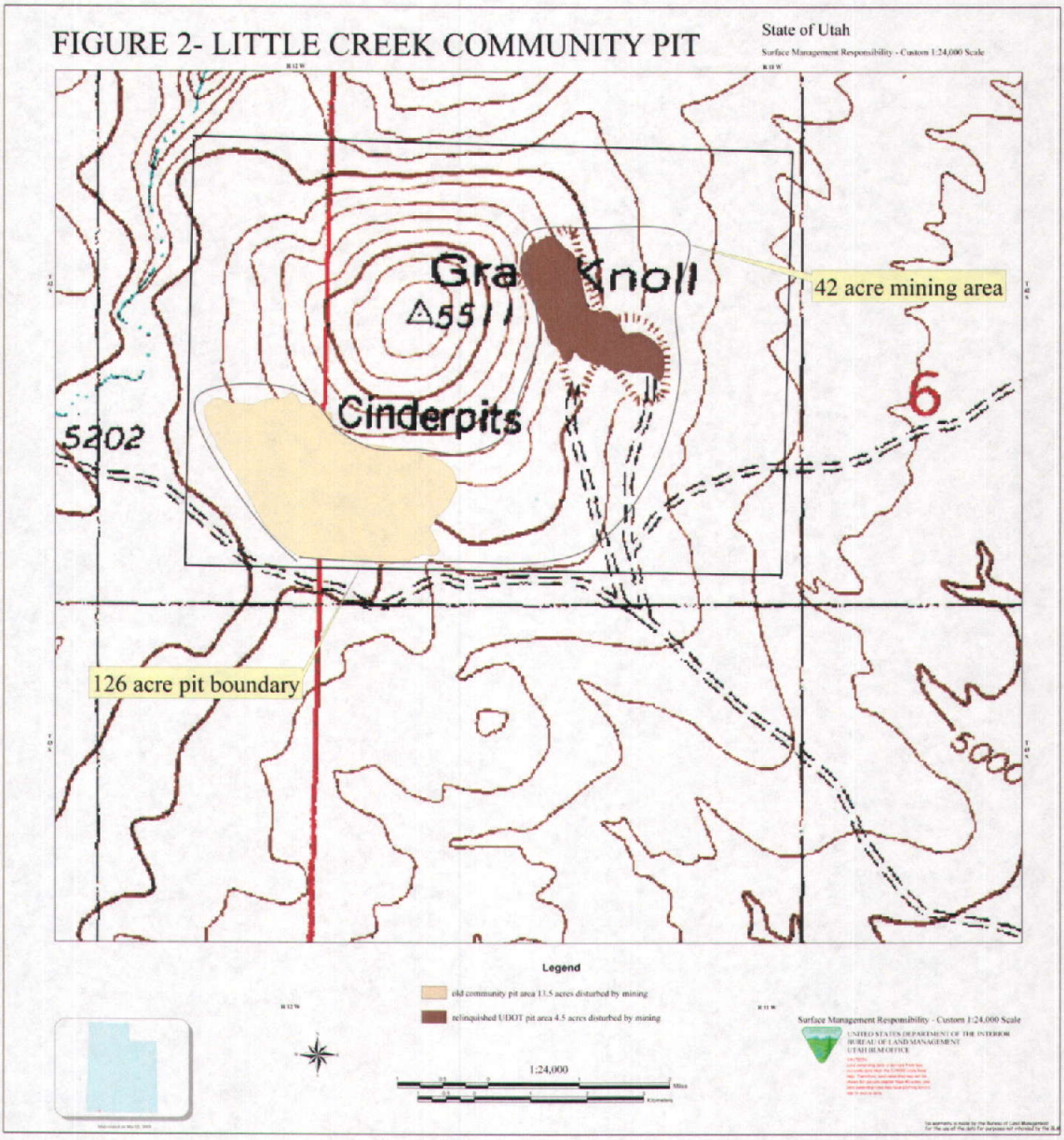


FIGURE 2- LITTLE CREEK COMMUNITY PIT



APPENDIX B

Photograph 1. Overview of the Little Creek cinder cone from the access road looking to the west. The highwall in the east pit, the former UDOT mineral material site Right of Way is visible from Highway 59 and the access road at Big Plain Junction.

Photograph 2. Overview of the Little Creek Cinder cone and the south pit area looking east from the main access road on Little Creek Mesa.

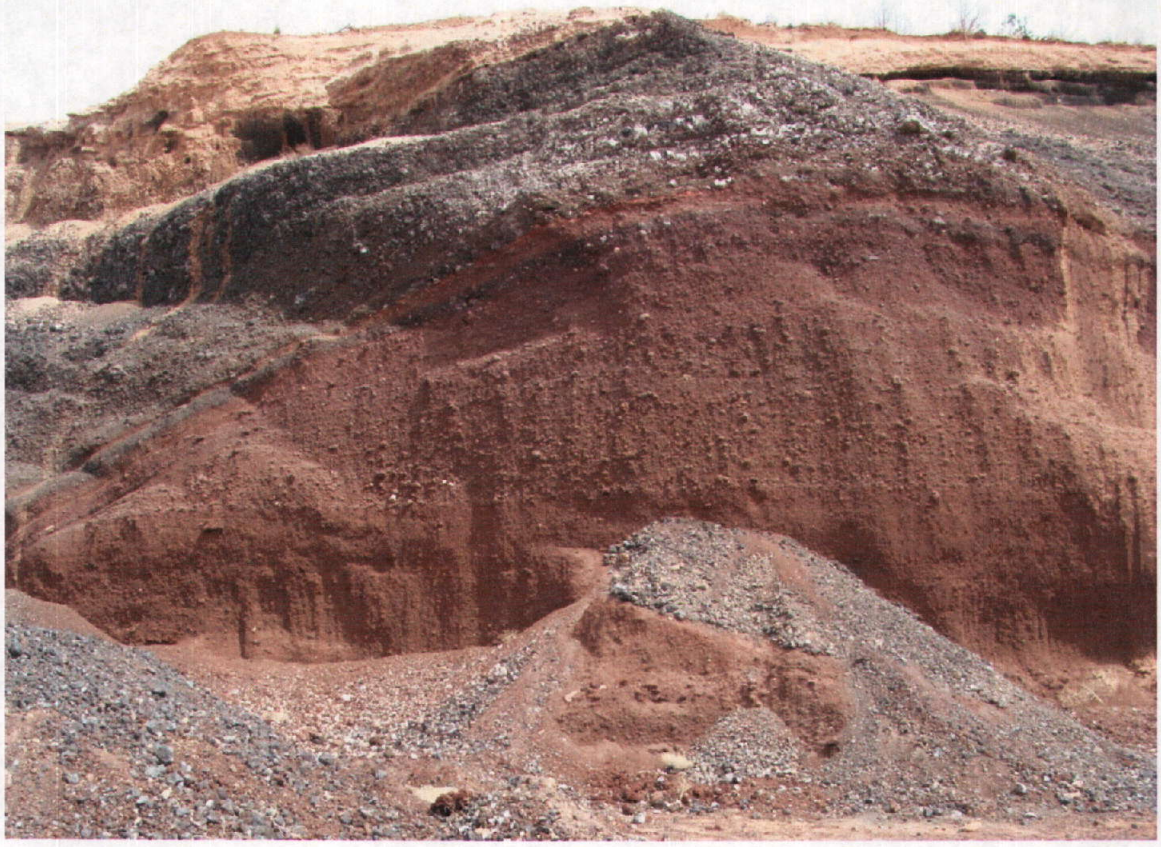
Photograph 3. View of the old UDOT open-cut site on the east side of the cinder cone.

Photograph 4. Overview of the old UDOT material site operations area on the east flank of the cinder cone just below the open-cut.

Photograph 5. Close-up view of the working face, showing black cinders ranging from ¼ inch to 6 inches in length in the east pit area. Ruler for scale is 6 inches in length.

Photograph 6. View of the southern pit and cinder cone.

Photograph 7. View of the southern pit from the head of the cut. Note that the Thirstystone pit in the Chinle Formation, Shinarump Member conglomerate/sandstones is visible in the distance.



Photograph 8. Close-up of the southern pit red/black cinder contact with 2 ft to 4 ft thick soil cover.

Photograph 9. Close-up of the working face, showing red cinders ranging from 1/8 inch to 4 inches in length in the south pit area. Ruler for scale is 6 inches in length.

FINDING OF NO SIGNIFICANT IMPACT
AND
DECISION RECORD
Little Creek Community Pit
UT-100-09-EA-09
UTU-70051

"Based on the analysis of potential environmental impacts contained in the attached environmental assessment (UT-100-09-EA-09), I have determined that the action will not have a significant effect on the human environment. An environmental impact statement is therefore not required."

Decision:

"It is my decision to authorize the Little Creek Community Pit as described in UT-100-09-EA-09."

Summary of the Selected Alternative:

The Little Creek Cinder Community Pit administered by the Bureau of Land Management (BLM) is located on Little Creek (Gray Knoll) cinder cone in Apple Valley approximately 10 miles southeast of Hurricane and 20 miles east of St. George in T. 43 S., R. 11 W., sec. 6 and T. 43 S., R. 12 W., sec. 1 in Washington County, Utah (Figure 1). Mining of cinders as a source of lightweight aggregate has taken place in the Little Creek cinder cone (Gray Knoll) site since 1945 and a total of 200,000 tons of cinders as determined by GPS survey have been mined. In 1961, a 127.5 acre Mineral Material Right of Way (U-60729) on the east part of the cinder cone was issued to Utah Department of Transportation (UDOT) for road construction and maintenance. In 1991, a patent application (U-18932) for claims filed in the 1950's was rejected and in 1992, the Little Creek Community pit consisting of 63.74 acres on the south side of the cinder cone was established (U-70051) to provide a continued local source of cinders to the community. In 2007, UDOT relinquished their Material Site ROW and the Little Creek Community pit was redefined to a designated 126 acres that includes the entire cinder cone and all the disturbed areas. Sixty-five acres to the north of the cinder cone previously under the UDOT material site ROW were not included in the pit designation.

The BLM St. George Field Office completed Categorical Exclusion 91-47 in 1991 for general operations within the Little Creek Community pit that is no longer sufficient for the scope of the operations and needs to be updated to assure conformance with environmental requirements. The proposed 42 acre active sales area within the redefined

126 acre Community pit designation would encompass the existing disturbance on the cinder cone and allow for continued resource development. The designated Little Creek Community Pit boundary now includes part of the acreage that was part of the former UDOT ROW. The original 1992, 64 acre designated community pit area includes only half of the 13.5 acre south pit disturbance and does not include the 4.5 acre former UDOT east pit disturbance. The total UDOT/Community pit designated area would be reduced from 191 acres to a designated Community pit area of 126 acres. Mining operations within the Little Creek Community pit are designed to be low to moderate impact and yearly sales are limited to 50,000 tons per year or less as necessary. This assessment will evaluate the impacts for the potential sale of 1 million cubic yards of cinders through competitive/negotiated sales, small (less than $2000.00) over the counter sales and free use permits from the active sales area of the community pit. Both short and long term contracts to remove mineral materials are issued to state and local governments, companies and the general public. Mineral materials are sold at fair market value, which is determined through appraisal. Approximately 18 acres have been affected by mining to date, 4.5 acres within the east pit and 13.5 acres in the south pit. This EA will analyze the environmental impacts of mining of cinders for the proposed 42 acre sales area.

The cinders are used as a source of lightweight aggregate, typically for use as road metal and in the manufacture of cinder block products. These materials are not readily available on private lands and this community pit represents a local source for St. George and the Washington County area. Washington County is growing and the current and planned development projects will increase demand for all mineral materials. Mineral material sales may be made as long as the aggregate damage to public lands and resources would not exceed the benefits derived from the proposed sale (43 CFR 3600.0-4).

"This decision is contingent on meeting all stipulations and monitoring requirements listed below."

1. The operator is required to obtain any air quality or operational permits required by state, county, or local laws prior to commencing operations. The holder of the contract shall not violate applicable air and water quality standards or related facility siting standards established by or pursuant to applicable Federal or State law. The operator shall ultimately be responsible for dust abatement within the limits of the permitted area and is responsible for consultation with the Authorized Officer and local authorities for acceptable dust abatement and control methods.

2. The operator shall not cause fugitive dust to become airborne without taking reasonable precautions and shall not cause or permit the discharge of visible emissions of fugitive dust beyond the lot line of the property on which the emissions originate.

3. Unpaved haul roads shall be treated with chemical dust suppressant and/or watered as necessary. All dust palliative applied must be not prohibited for ground surface application by the EPA, state and local governments or any applicable law or regulation, as treatment material for reducing fugitive dust emissions. All improvements and maintenance to access roads will be coordinated with Washington County Public Works (e.g., adding a dust suppressant, watering and blading).

4. The operator shall have all vehicles associated with this mining operation to restrict their travel speeds to 25 mph to prevent wildlife impact.

5. No hazardous material or substance will be used or stored on site without specific written authorization of the Authorized Officer. No authorization will be issued for material that is not specifically required for the authorized operations. Solid waste will not be buried, or disposed of on-site, unless permitted. No sewage holding tank discharge will occur on-site, unless permitted. No discharge of oil or other petroleum products is allowed on-site. A self-contained portable toilet and trash dumpster is required for any extended operations.

6. The operator shall collect, remove, and dispose of all trash, garbage, debris, used oil, and other waste materials. These materials must be disposed of in an approved disposal area. Unnecessary material or equipment, including derelict or non-operational vehicles, empty drums or containers, construction debris, unused equipment or other materials, will be removed immediately from the project area.

7. Should any cultural resources such as: boulders containing rock art, human remains, burial items, structures or features (dark soil containing charcoal or artifacts, wall floor, etc.) be encountered during ground disturbing activities, all activity will cease immediately and the Saint George Field Office will be notified immediately pursuant to 36 CFR 80.11.

8. Proper drainage shall be maintained to avoid areas of standing water. Natural drainage shall not be interrupted and excavated material shall not be placed in drainages where it could be washed downstream.

9. Top soil will be salvaged and stockpiled for future reclamation.

10. Reclamation of all surface disturbances must be initiated immediately upon completion of activities, unless otherwise approved by the authorized officer. Reclamation of disturbed areas shall, to the extent practicable, include contouring disturbances to blend with the surrounding terrain, replacement of topsoil, smoothing and blending the original surface colors to minimize impacts to visual resources, and seed the disturbed areas with a mix specified by the Authorized Officer. The slope will be stabilized to prevent erosion.

11. The operator shall comply with Washington County ordinances that require the prevention and abatement of noxious weeds and remove through mechanical or approved chemical means any populations that are found on site.

12. The project area may require fencing if livestock are reintroduced and livestock entering the operation area becomes a problem.

13. Crushing operations will require pre-approval from the Authorized Officer and a conditional use permit from Washington County.

Rationale for the Decision:

The proposed action, to continue mineral extraction from the redefined Little Creek Cinder Community Pit administered by the Bureau of Land Management (BLM) located on Little Creek (Gray Knoll) cinder cone in Apple Valley approximately 10 miles southeast of Hurricane and 20 miles east of St. George in T. 43 S., R. 11 W., sec. 6 and T. 43 S., R. 12 W., sec. 1 in Washington County, Utah on lands administered by the St. George Field Office of the Bureau of Land Management (BLM), is in conformance with Federal Regulations and Bureau Policies.

The action conforms to the St. George Field Office Resource Management Plan, signed March 1999, Decision MI-12, page 2.9: "Numerous mineral material sites have been located on public lands in Washington County to meet the needs of private landowners, contractors, and government agencies. Sale of mineral materials from these sites will continue until depletion occurs on individual sites or these lands are transferred out of public ownership." This action also conforms to Decision MI-16, page 2.9: "A total of 345,104 acres of land will remain open for mineral material sales on a case by case basis, subject to additional environmental review." Areas to be closed to mineral material sales are depicted in Table 2-6 and on Map 2.7 and total 265,732 acres. Map 2-7 on page 2.80 shows the area of expanded community pit operations to be fully within the open area.

The Act of July 31, 1947, as amended (30 U.S.C. 601 et seq.) gives authority for the disposal of mineral materials from public lands of the United States. Section 302 of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1732) directs the Secretary to manage public lands under the principles of multiple use and sustained yield in accordance with land use plans developed under the act.

The 43 CFR 3600 regulations establish procedures for the exploration, development and disposal of mineral material resources under permit or contract for sale, or free use. Subpart 3604 deals with community pits and common use areas, while Subpart 3610 deals with mineral material sales.

Mineral materials are not readily available on private lands and this community pit represents a local source cinders for St. George and the Washington County area. Washington County is rapidly growing and the current and planned development projects will increase demand for all mineral materials. Mineral material sales may be made as long as the aggregate damage to public lands and resources would not exceed the benefits derived from the proposed sale (43 CFR 3600.0-4).

The area under consideration would not affect any Areas of Critical Environmental Concern, prime or unique farm lands, Native American Religious Concerns, hazardous or solid wastes, drinking or ground water, wetlands or riparian zones, recreation, wild and scenic rivers, floodplains, migratory birds, noxious weeds, designated wilderness or environmental justice issues.

The No Action Alternative was not selected because it would fail to meet the growing need for mineral materials in the rapidly developing St. George Metropolitan area and surrounding regions. Neither would it meet objectives for mineral resources identified in the St. George Field Office Record of Decision and Resource Management Plan (1999, page 2.7), that state BLM will "continue to provide mineral materials needed for community and economic purposes through the designation and management of material sites for individual and community use." Closure of the existing community pit would have immediate and long term impacts to individuals, contractors, and commercial operators serving the region.

This decision may be appealed to the Interior Board of Land Appeals, Office of the Secretary, in accordance with the regulations contained in 43 CFR, Part 4 and the enclosed Form 1842-1. If an appeal is taken, your notice of appeal must be filed in this office (at the above address) within 30 days from receipt of this decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition (pursuant to regulation 43 CFR 4.21 (58 FR 4939, January 19, 1993) (request) for a stay (suspension) of the effectiveness of this decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay is required to show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for a stay must also be submitted to each party named in this decision and to the Interior Board of Land Appeals and to the appropriate Office of the Solicitor (see 43 CFR 4.413) at the same time the original documents and filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulation, a petition for a stay of a decision pending appeal shall show sufficient justification based on the following standards:

1) The relative harm to the parties if the stay is granted or denied,
2) The likelihood of the appellant's success on the merits,
3) The likelihood of immediate and irreparable harm if the stay is not granted, and
4) Whether the public interest favors granting the stay.

Jimmy Tyree
Field Office Manager

Enclosure: 1. Form 1842-1